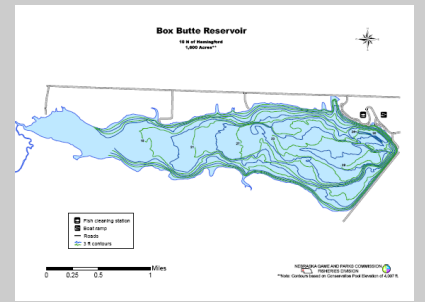


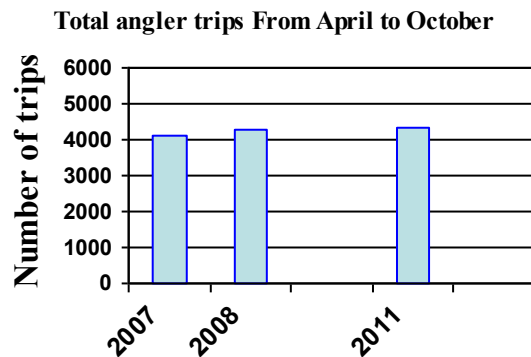
Box Butte Reservoir 2011 Creel Survey Summary

Nebraska Game and Parks Commission
Joe Rydell, Fisheries Biologist



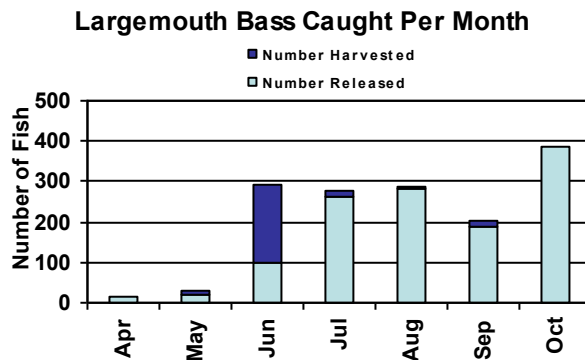
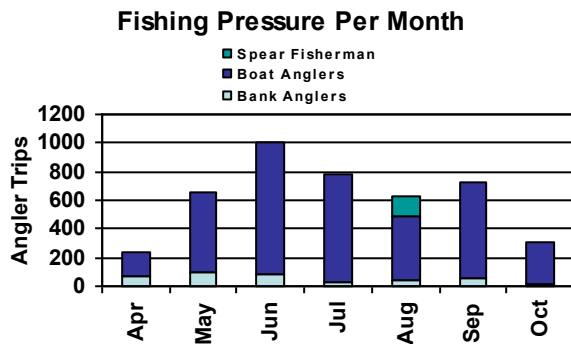
Fisheries staff recently completed an angler creel survey on Box Butte Reservoir located in the panhandle of Nebraska running from April 1, 2011 through October 31, 2011. During this time period, anglers were counted and interviewed on 20 randomly selected days per month, 14 during the week and six on weekends. The information gathered from this survey provided estimates of angling pressure, catch and harvest, size structure of the fish caught, and catch per hour. These estimates also allow fishery managers valuable insight and helps monitor new fishing regulations that are implemented on these water bodies. One example of this is the impact of allowing underwater spearfishing starting on June 1st instead of the original start date of July 1st. This new regulation was imposed beginning in 2011.

The following text and graphs provide summaries of the 2011 survey data with comparison to the 2007-2008 creel surveys conducted on Box Butte.



In 2011, lake levels at Box Butte Reservoir were at the highest recorded levels in over ten years. Increased water levels significantly contributed to angler use. An estimated 4,340 angler trips were made to Box Butte Reservoir from April 1st to October 31st in 2011. This is similar to angler use estimated from the 2007 and 2008 surveys. Higher water eliminated bank access for the majority of Box Butte Reservoir. Estimated bank angler effort was down during the survey period in 2011 to 402 angler trips compared to 689 in 2008 and 614 angler trips in 2007. Anglers spent an estimated 15,186 hours fishing during the survey period in 2011, with the average trip lasting approximately 3.5 hours.

Forty percent of Box Butte anglers either sought walleye or northern pike on their fishing trips while 8% sought largemouth bass, 2% sought bluegill, and 41% fished for any species available.

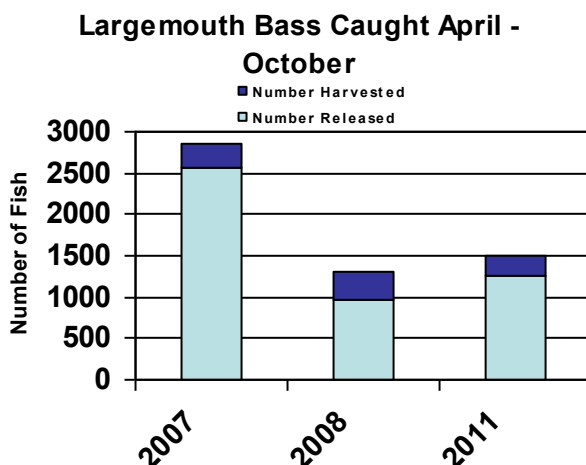


Largemouth Bass

Fishing for warm water species like largemouth bass typically warms up with the water temperature in May and June and then slowly tapers off into fall. In 2011 largemouth bass catch was good all summer with a peak in October likely due to reduced water late in the year. There was a significant largemouth bass harvest in June largely due to the impact of underwater spear-fishing. Spear-fisherman contributed to approximately 33% of the total harvest of largemouth all taken in the month of June.

Largemouth bass fisherman saw a slight increase in catch rates at Box Butte Reservoir in 2011. A total of 1,495 bass were caught with 84% of those fish released and 240 bass harvested. Previous creel survey showed an average release rate of 74%. The average length of bass harvested was about 17.2 inches.

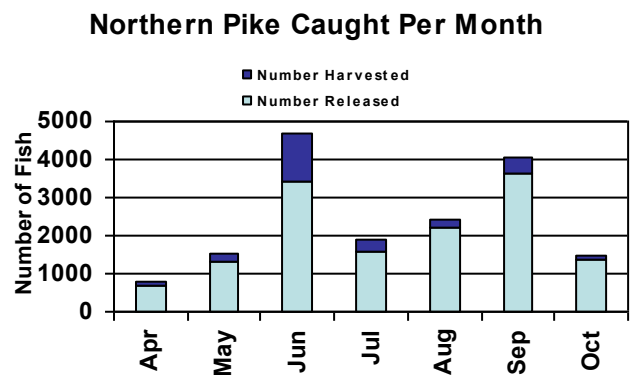
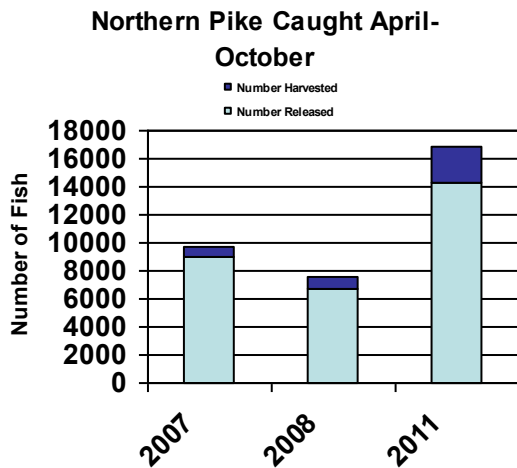
Catch rates for fisherman targeting bass was up to 0.36 fish per hour in 2011 compared to 0.14 fish per hour in 2008.



Northern Pike

More anglers sought northern pike in 2011 (18.3%) than in either 2008 (2.5%) or 2007 (0.43%). Northern pike fishing peaked in June, then dropped in July, and gradually picked up as the water dropped throughout the summer.

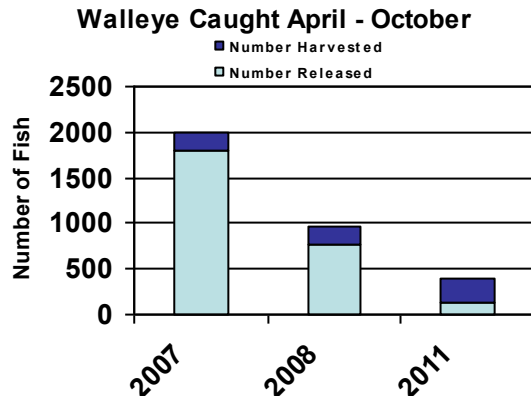
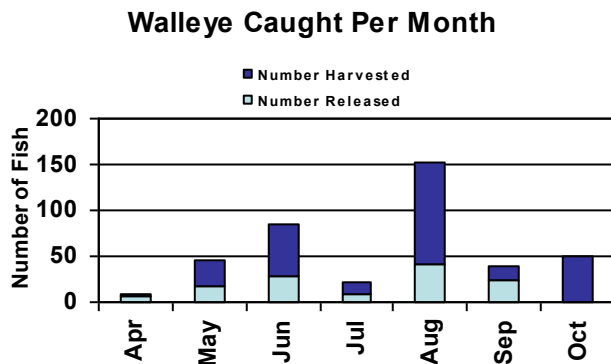
The 2011 total catch for northern pike was higher than either 2007 or 2008. Eighty-five percent of the estimated 16,874 pike caught from April to October in 2011 were released. The average length of pike harvested was 19.7 inches compared to the previous average from 2008 of 19.4 inches. The catch rate for anglers seeking northern pike was 1.59 fish per hour and anglers took home an average of 0.44 fish per hour.



Walleye

High water in 2011 likely contributed to tough conditions for targeting walleye. Walleye fishing was slow most of the year with a peak in August when the water dropped.

Walleye anglers continue to see a decline in catch rates at Box Butte. Despite lower total catch, walleye fisherman harvested more walleye in 2011 (274) than in the previous years. The catch rate for anglers seeking walleye dropped in 2011 from 0.07 fish per hour in 2008 to 0.06 fish per hour; however, the harvest rate was higher in 2011 (0.05 fish per hour) than 2008 (0.03 fish per hour). The average harvested walleye was about 17.2 inches in length.

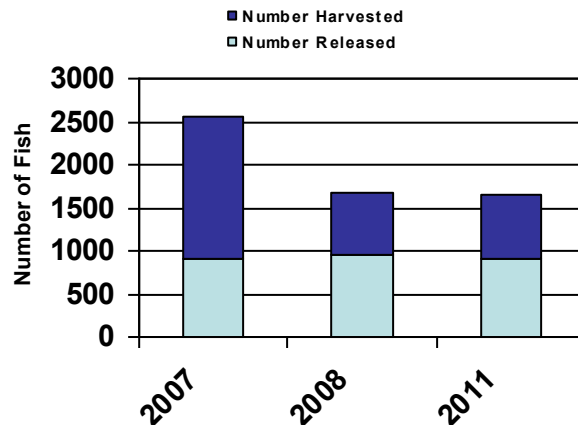


Bluegill

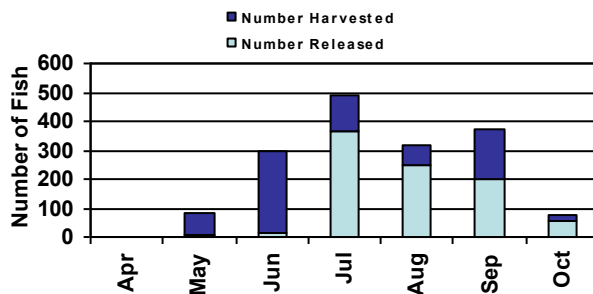
Bluegill catch from April to October of 2011 was similar to that reported in 2008. A total of 1,645 bluegill were caught with anglers harvesting 45%. The average length of harvested bluegill remains exceptional at 8.6 inches. Catch rates for anglers seeking bluegill was 0.64 fish per hour and harvest rates were 0.25 fish per hour.

Bluegill catches peaked in July and tapered off into the fall. Most of the bluegill harvest on Box Butte typically occurs during ice fishing. During the 2007 and 2008 surveys, approximately 65% of the total bluegill catch occurred between November and March.

Bluegill Caught April - October



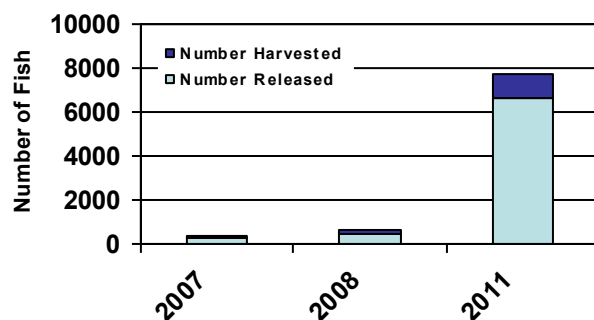
Bluegill Caught Per Month



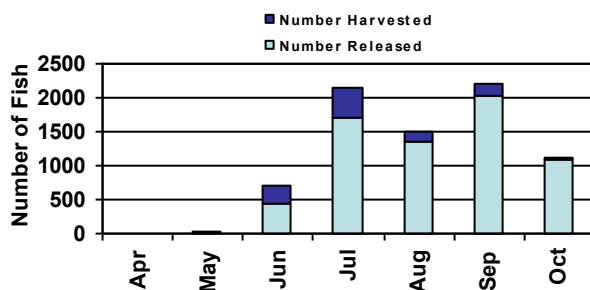
Yellow Perch

The yellow perch numbers rebounded in 2011 with 7,713 fish caught at Box Butte. Anglers harvested about 13.9 % of the perch caught. The average length of yellow perch harvested in 2011 was similar to 2008 (8.6 inches) at 8.5 inches. Anglers seeking yellow perch caught 1.59 fish per hour and harvested 0.41 fish per hour. Like bluegill the majority of the yellow perch harvest typically occurs during ice fishing. Of the 1,754 perch caught in 2008, 76% were caught between November and March. Yellow perch started biting in July and remained a good bite throughout the summer and fall.

Yellow Perch Caught April - October

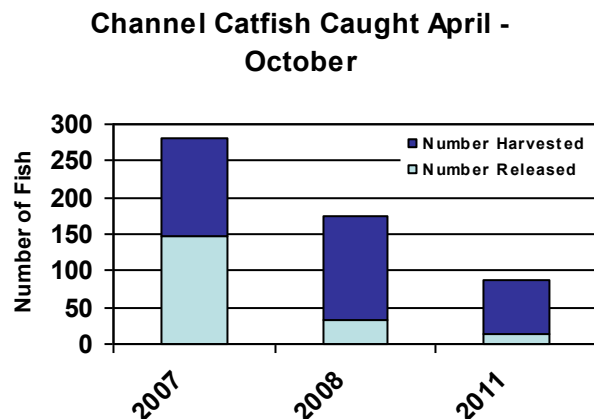


Yellow Perch Caught Per Month



Channel Catfish

Channel catfish catch continues to drop in 2011 with an estimated 88 fish caught at Box Butte. Although the total catch is low, Box Butte continues to produce very quality catfish. The average length of channel catfish harvested was up to 25.3 inches in 2011 compared to 24 inches in 2008. Anglers targeting channel catfish caught 0.01 fish per hour in 2011 with very few fish returned.



Additional Angling Opportunities

Smallmouth bass fishing is picking up on Box Butte since their introduction to the lake in 2009. Anglers caught 303 smallmouth bass in 2011 and harvested 8.

Box Butte reservoir is the only lake in the panhandle where anglers can catch European Rudd. This rough fish is very popular with spear fisherman and archery fisherman.

For additional information about fisheries management in the panhandle, please contact the NGPC Alliance office at 308-763-2940 or by email at the addresses listed below:



Al Hanson, District Supervisor
(308) 763-2940 or al.hanson@nebraska.gov



Joe Rydell, Fisheries Biologist
(308) 763-2940 or joe.rydell@nebraska.gov



Zac Brashears, Fisheries Biologist
(402) 376-8080 or zac.brashears@nebraska.gov